

FACT SHEET

September 2000



Interim Remedial Action/Corrective Measure Site/SWMU 3 Causeway Landfill MCRD Parris Island, South Carolina

This fact sheet provides an overview of the work that will be completed during the interim remedial action/corrective measure at Site/Solid Waste Management Unit (SWMU 3) Causeway Landfill at the Marine Corps Recruit Depot (MCRD) Parris Island. MCRD Parris Island is a National Priority List (NPL) site and the work described in this fact sheet is being conducted under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)/Installation Restoration Program (IRP).

Interim Remedial Action/ Corrective Measure Objective

The primary objective of the Interim Remedial Action/corrective measure is to control exposure of human and ecological receptors to chemicals of concern (COCs). In addition, the IRA objectives include the following:

- Control migration of COCs from the landfill materials to surface water, sediment and groundwater, and
- Comply with chemical-, action-, and location-specific federal and state requirements.



Ribbon Creek pond side

Site Description

The site formerly was a disposal area for trash and other materials deposited in dumpsters around MCRD Parris Island between 1960 and 1972. Between 1960 and 1965, the landfill received approximately 75 percent of the solid waste generated by the MCRD. The site was inactive between 1966 and 1968. Between 1969 and 1972, the site received all of the MCRD's solid waste, and the landfilling operations ceased at the site in 1972.

The causeway was constructed in two separate sections across a tidal marsh of the Broad River. One section began from the northeast edge of Horse Island and was built primarily with fill dirt taken from the borrow pits on Horse Island. The other section started near the southern end of Talasessa Street on Parris Island and was built with the solid waste from MCRD and with fill dirt. Aerial photos taken in 1951, 1965, and 1972 illustrate that the two sections of causeway gradually extended into the marsh until they met in 1972. At its completion in 1972, the causeway was approximately 10 acres in size, 4,000 feet long, 100 feet wide, and 10 feet high (above the water surface), with a gravel road surface and riprap sides overgrown with vegetation.

Selected Interim Remedy

The site has been studied as part of the MCRD environmental management program. The program is being implemented in partnership with the U.S. Environmental Protection Agency (EPA) and the South Carolina Department of Health and Environment Control (SCDHEC). In addition, U.S. Fish and Wildlife, National Oceanic and Atmospheric Administration, and



Existing causeway

South Carolina Department of Natural Resources are full partners in the MCRD environmental management program for developing and implementing the remedy at the Site/SWMU 3 for the protection of human health and the environment. The selected interim remedy for the site, which has been approved by the Partnering Team (agencies listed above and the Navy) is briefly described below. A detailed description of the remedy will be provided in the Record of Decision (ROD) for the site.

The sides of the causeway will be stabilized with regrading and slope protection measures such as vegetation, riprap, and fabriform. These actions will minimize waste erosion into the environment resulting from water runoff, waves and/or wind.

Soil will be added to the top and sides of the causeway to ensure that a minimum of 2 feet of soil cover will be present over the waste materials in the landfill in order to comply with Federal and State landfill regulations (i.e., 2 feet minimum of soil cover thickness over waste materials). The 2 feet of soil cover over wastes will protect human health. In other areas of the causeway, 1 foot of additional soil cover will be placed. This additional cover will protect terrestrial wildlife. The two



Culverts under the causeway

actions will result in additional soil cover material placement over approximately two-thirds of the length of the causeway. Over the balance of the causeway, the existing cover is protective of human health and terrestrial wildlife.

After the completion of the above two actions, an asphalt paved road will be constructed that will reduce precipitation infiltration into the waste and reduce erosion of cover material.

The four areas of sediment contamination identified on the pond side of the causeway will be covered with a minimum of 2 feet of soil cover, and the sediment areas beyond the limits of soil cover will be sampled/analyzed to determine whether further action of the sediment areas is needed. A Proposed Plan/Record of Decision will be drafted separately for the sediments.

Land use controls will be implemented to control exposure pathways to contaminants of concern through the Land Use Control Implementation



Fishing piers on pond side

Project Schedule	2000					2001				
	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	
Remedial Design Complete	◆									
Construction		September 11								
Construction Completion									◆	

Note: The causeway will be closed due to construction from September 18, 2000 until April 2001.

Plan and Land Use Control Assurance Plan. Long-term monitoring will consist of annual groundwater testing for the first 5 years following construction. A re-evaluation of the site will be performed every 5 years to determine whether changes to the site restrictions and monitoring frequency are needed. Periodic inspections will be conducted following construction to ensure the long-term integrity of the remedy and effectiveness of the land use controls.

Project Organization

The project organizations responsible for performing this interim remedial action/corrective measure include the following:

- Lead Regulatory Agency – EPA Region IV, Atlanta, Georgia
- State Regulatory Agency – SCDHEC, Columbia, South Carolina
- Owner – MCRD Parris Island and the United States Navy, Southern Division, Naval Facilities Engineering Command, Charleston, South Carolina
- Remedial Action Contractor – CH2M HILL Constructors, Inc., Atlanta, Georgia
- Comprehensive Long-Term Environmental Action Navy (CLEAN) Contractor – TetraTech NUS, Inc., Pittsburgh, Pennsylvania

Additional Information

Additional information and studies about the Site/SWMU 3 Causeway Landfill site are available for public review in the Administrative Record at the Beaufort County Public Library, 311 Scott Street, Beaufort, SC 29902.

Related Documents	Date
RCRA Facilities Investigation/Remedial Investigation Report	March 1999
Feasibility Study/Corrective Measures Study	June 2000
Proposed Plan	July 2000
Record of Decision	September 2000
Land Use Control Assurance Plan	September 2000

Questions or comments concerning this Fact Sheet can be directed to Mr. Tim Harrington, MCRD Parris Island at the contact listed below.

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